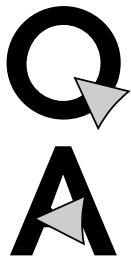


What is the New Jersey heavy duty diesel emission program?

The heavy duty diesel emission program is one of New Jersey's initiatives for healthier air. It identifies trucks with excessive smoke emissions and encourages the proper repair and maintenance of diesel trucks. Heavy duty diesel trucks release about 30 tons of particulate emissions (soot) into the air every day. This accounts for about 90% of the particulate emissions from all motor vehicles.



What are the program's elements?

The diesel inspection program requires:

- ▶ testing of all diesel-powered motor vehicles over 18,000 GVWR* for smoke emissions annually at licensed **diesel emission inspection centers (DEICs)**.
- ▶ roadside emission testing by the NJ State Police and Motor Vehicle Services. Owners of vehicles that fail the smoke test will receive summonses and fines. Vehicles may also be safety inspected by the NJ State Police. Roadside inspections apply to New Jersey and out-of-state registered heavy-duty diesel vehicles.

* Gross vehicle weight rating



How are the diesel trucks tested?

Trucks at DEICs will be tested with the following methods:

▶ Snap Acceleration Test

During an initial phase of testing the snap acceleration test is permitted.

The vehicle is held stationary with wheel chocks and brakes released as the engine is rapidly accelerated to high idle with the transmission in neutral while smoke emissions are measured. This test is conducted a minimum of six times and the three most consistent measurements are averaged together for a final score.

▶ Rolling Acceleration Test

Vehicles with a manual transmission are rapidly accelerated in low gear from an idle speed to a maximum governed RPM while the smoke emissions are measured.

▶ Stall Acceleration Test

Vehicles with automatic transmissions are held in a stationary position with the parking brake and service brakes applied and the transmission is placed in "drive." The accelerator is depressed and held momentarily while smoke emissions are measured.



What emission test is performed during roadside inspection?

Trucks will be tested roadside using the snap acceleration test.



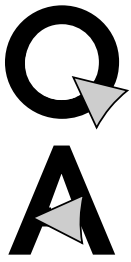
How is diesel smoke measured?

Smoke is measured for opacity – its ability to allow light to pass through. For example, a measure of 0% opacity means the exhaust has no visible smoke and does not block the light beam, 100% opacity means the exhaust is so dark it completely blocks the light beam and 50% opacity means the exhaust blocks half the light beam.

If the truck's smoke opacity is measured higher than the percentages below, it has failed the smoke opacity test.

Model year	Opacity
1991 or newer	40%
1974 – 1990	55%
1973 or older	70%

Owners of trucks that emit continuous visible blue smoke may receive summonses and fines. Owners of trucks missing a muffler may receive a summons and fine.



What are the penalties if a truck doesn't pass the road-side emission inspection?

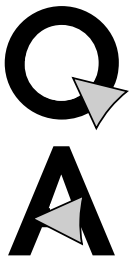
The NJ State Police can issue a summons to vehicle owners if the truck fails the smoke opacity roadside test. Penalties are:

First offense: \$700

(reduced to \$150 if paid within 45 days with proof of repairs); or

Second offense: \$1,300

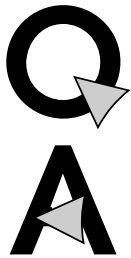
(reduced to \$500 if paid within 45 days with proof of repairs).



What causes excessive black smoke?

Excessive black smoke comes from poorly maintained engines or tampered with air/fuel controls. Some common examples are:

- ▶ Defective or tampered puff limiter or aneroid valve
- ▶ Maladjusted fuel rack
- ▶ Clogged, worn or mismatched injectors or nozzles
- ▶ Maladjusted injection timing
- ▶ Restricted air filters
- ▶ Contaminated fuel



What easy repairs can reduce excess black smoke?

You can:

- ▶ Adjust or replace puff limiter or aneroid valve
- ▶ Adjust fuel rack to manufacturer's specifications
- ▶ Clean or replace injectors or nozzles
- ▶ Adjust injector timing to manufacturer's specifications

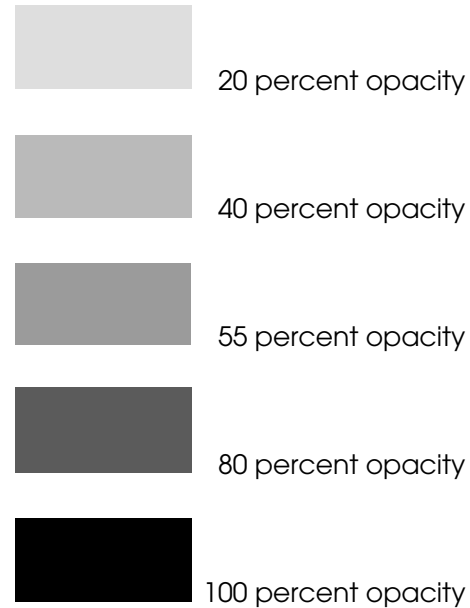


How can I tell how dirty my truck's smoke is?

Hold this chart at arm's length while someone performs a snap idle test on your truck's engine.

Compare your truck's exhaust smoke with the chart below. The closest match will give you an approximate idea of your truck's smoke opacity.

This chart is just an indication of the smoke opacity. It is not a substitute for the actual test.

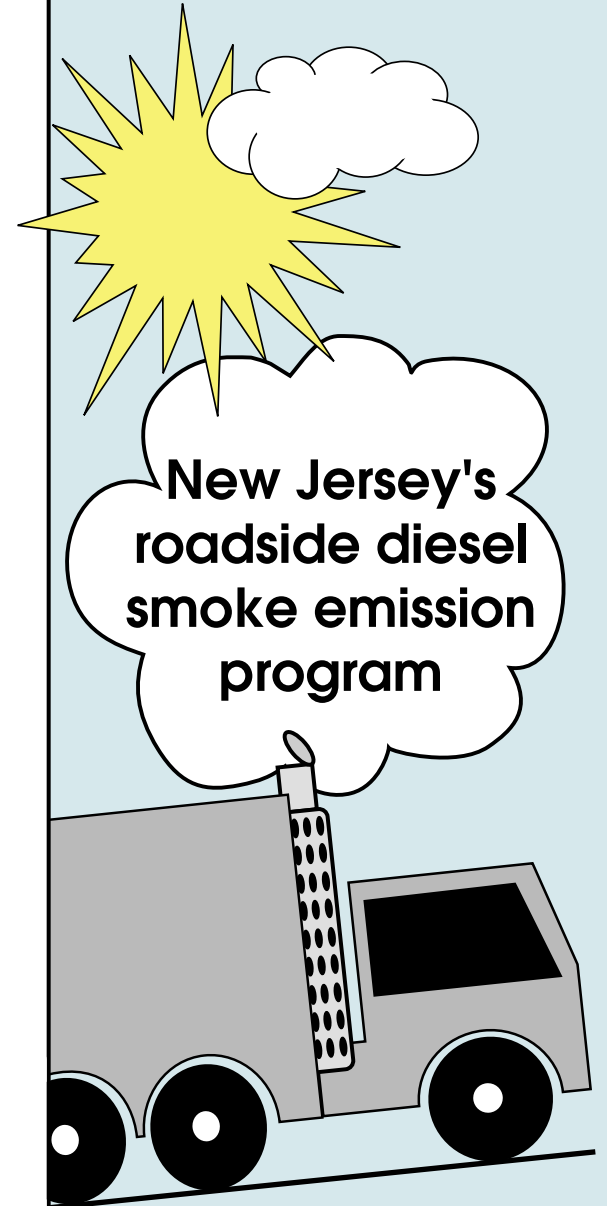


If you have any questions, contact:

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(609) 633-9473

SS-13 (R3/01)

For Truckers



**A New Jersey
program for healthier air**



New Jersey Department of Transportation
Motor Vehicle Services